

**SMART 2000**

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# Industry Perspective

**Dr. Ronald D. Sugar**  
**President and COO**  
**TRW Aerospace & Information Systems**

# The SMART Challenge

- Must transform the Army to the new Vision
- Can't do it the old way
- SMART provides the wherewithal





# Some Key Tenets of SMART

- Co-evolution of Requirements
  - Rapid Prototyping
  - Concurrent user interaction in design/simulation process
- Pervasive application of modern information technology and tools
  - Modeling and simulation provides the leverage
- Total system complexity demands SMART approach
  - No other viable alternative

# SMART Acquisition: Good for the Army and the Taxpayer

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- Recent experience with digitization demonstrated the need for evolutionary design & development
- SMART empowers the evolutionary approach
- SMART can provision soldiers trial tested-Tactical Doctrine & Unit Training Programs when new systems are fielded

# Automotive Industry Example





# Designing A Passenger Safety System

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Threat  
Scenario

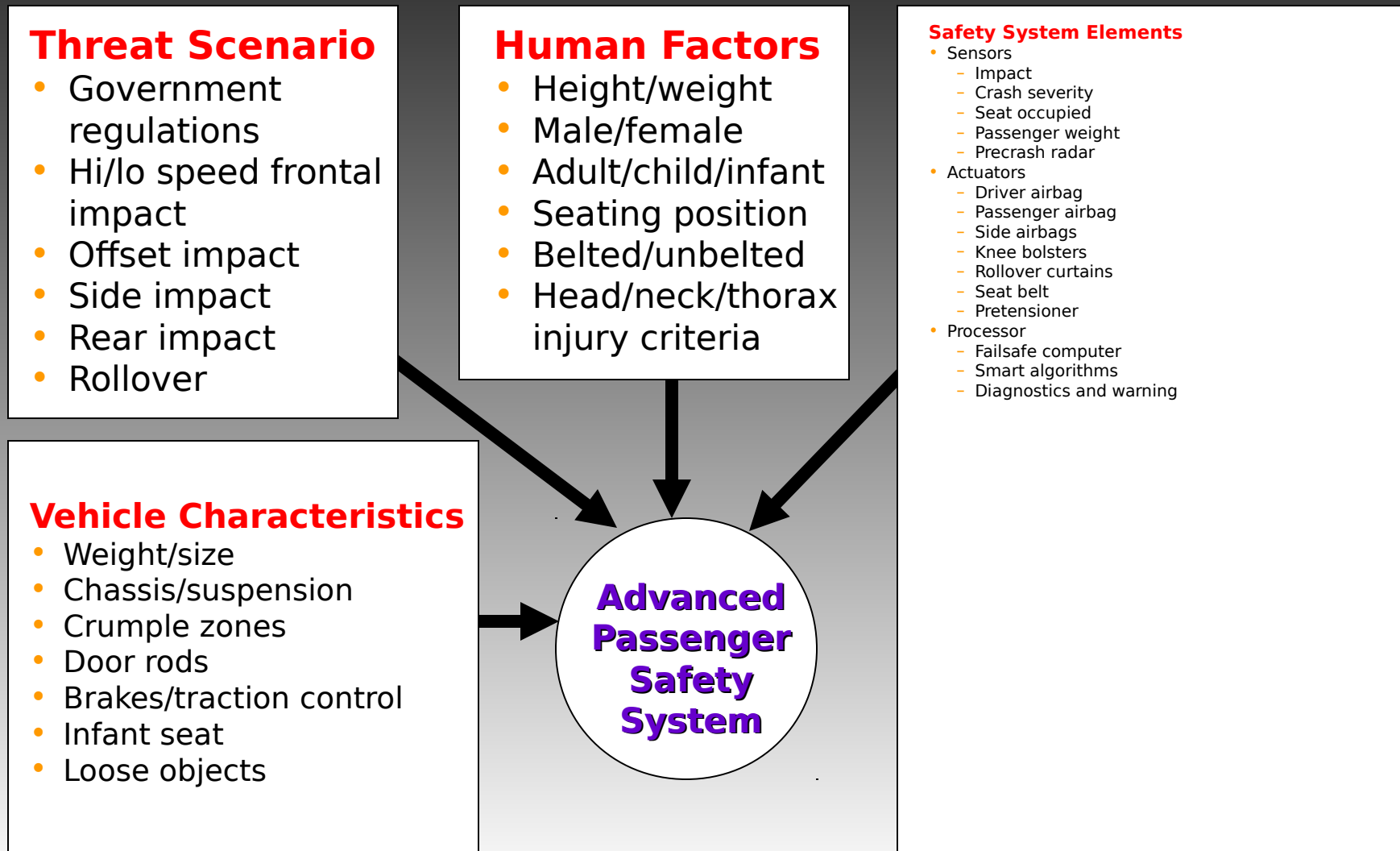
Vehicle  
Characteristics

Human  
Factors

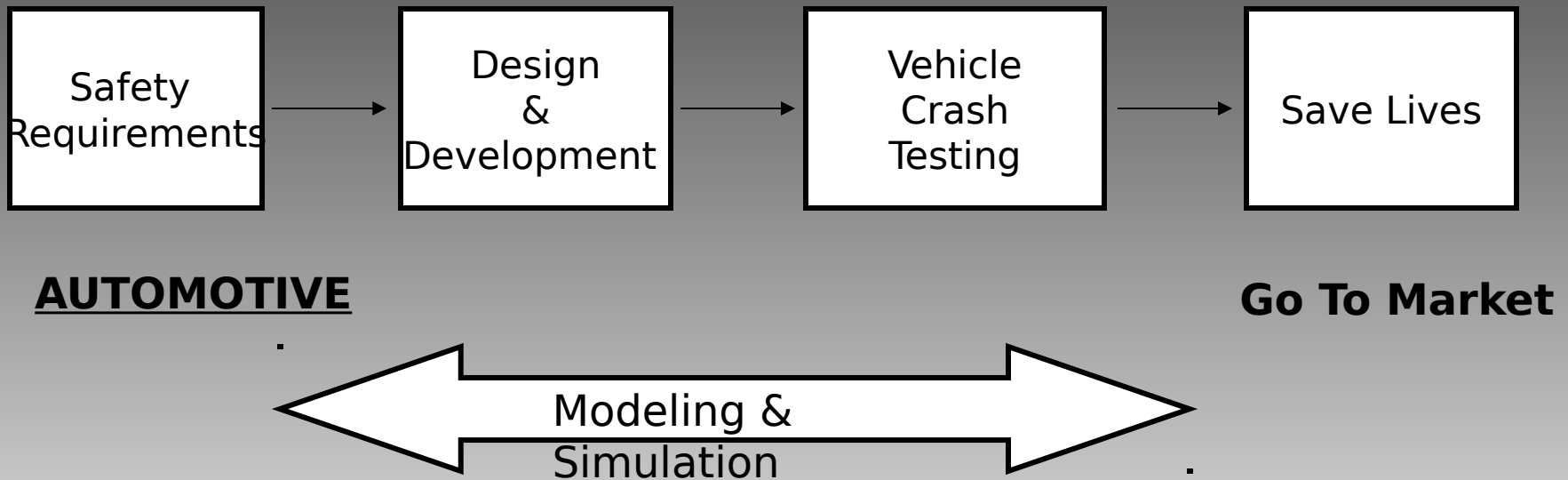
Safety System  
Elements

- Challenge - Deploy a passenger safety system which is
  - Reliable
  - Affordable
  - Anticipates wide range of physical conditions
  - Anticipates human factors

# Simulation & Modeling is Critical to System Design

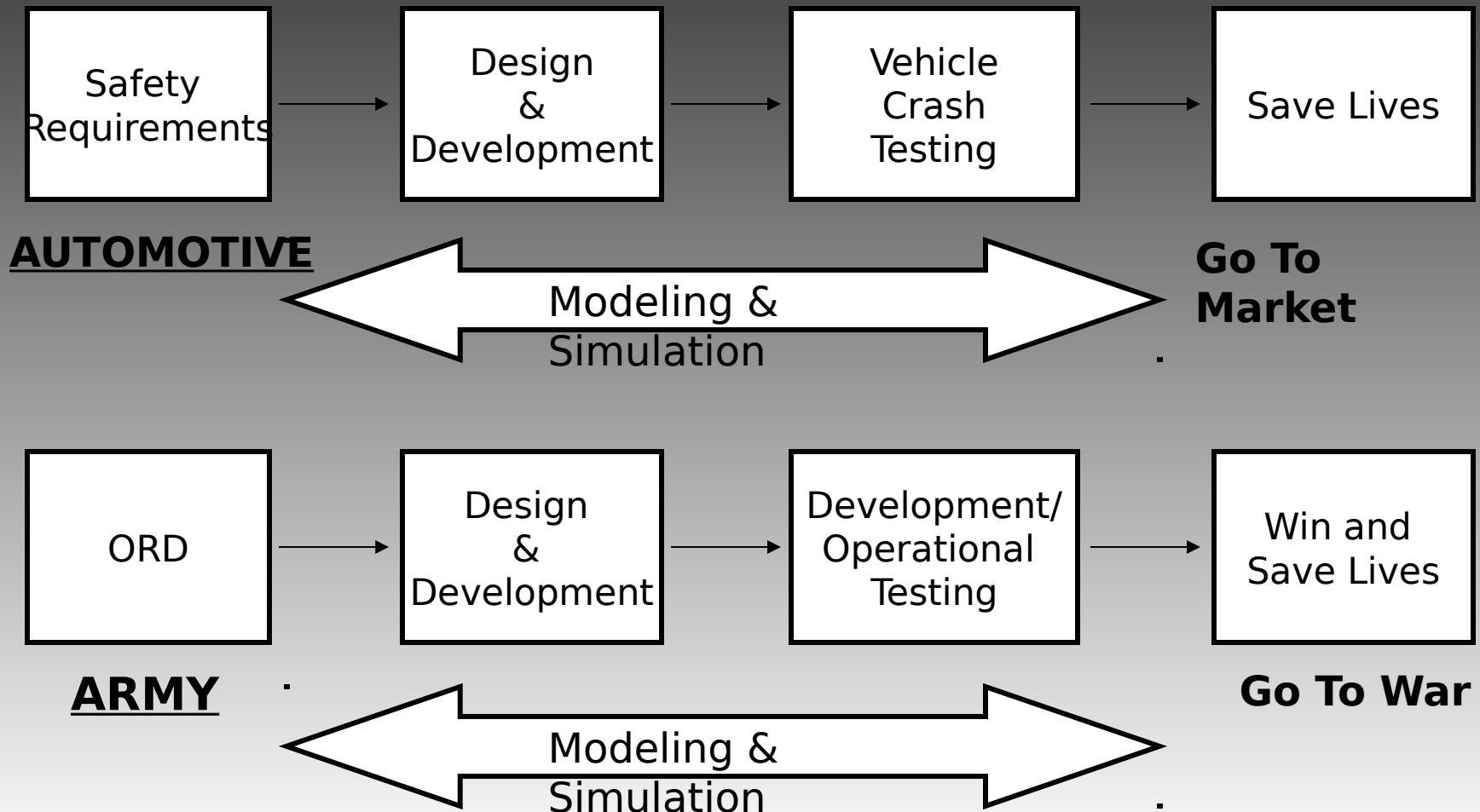


# Auto Industry/Army Analogy





# Auto Industry/Army Analogy



# Army Example-FBCB2

- The Challenge
  - Leverage information superiority as the decisive factor in battle
- Requirement
  - Bring all relevant information to bear on the outcome of the battle
  - Move the information as fast as the Army can move
- Design & Develop
  - Use the best practices of SMART in developing the system
    - Testing lessons learned, Leadership insights
- Result
  - The Army has moved quickly to develop and deploy FBCB2

# FBCB2





# Video



# Army/Industry Partnership

- Communicate
  - Candid/Timely/Constructive
- Collaborate
  - The Secretary & the Chief have set the tone
- Execute
  - “No one ever built their reputation talking about what they were going to do.” Henry Ford

**We in industry get the message**

# General Schriever and Dr. Ramo

## (1953)

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